

USER INFORMATION
WARNING
F.C.C. REGULATION COMPLIANCE

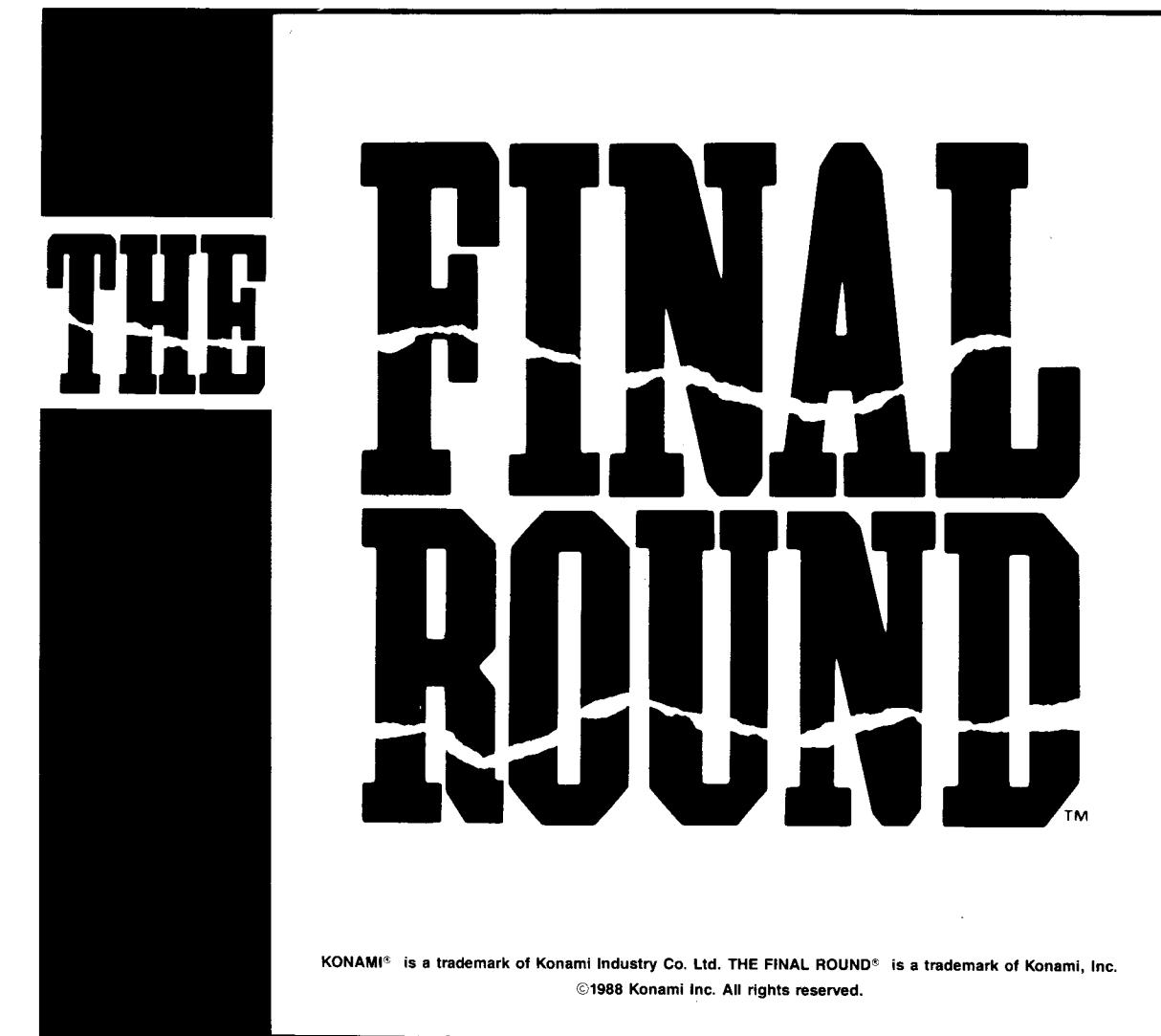
THIS KIT IS INTENDED FOR USE ONLY ON COIN-OPERATED VIDEO GAMES MANUFACTURED AFTER OCTOBER 1, 1983 WHICH HAVE BEEN VERIFIED FOR COMPLIANCE WITH REQUIREMENTS IN PART 15 OF F.C.C. RULES FOR A CLASS A COMPUTING DEVICE.

IMPROPER CONNECTION OF THIS KIT OR CONNECTION TO ANY OTHER GAME NOT SO MANUFACTURED OR VERIFIED FOR COMPLIANCE MAY CAUSE UNACCEPTABLE INTERFERENCE TO RADIO AND T.V. RECEPTION, REQUIRING THE OPERATOR TO TAKE WHATEVER STEPS ARE NECESSARY TO CORRECT THE INFERFERENCE.

THE P.C. BOARD CAGE SUPPLIED WITH THIS CONVERSION KIT MUST BE UTILIZED AND TERMINATED TO GROUND AT THE TIME OF INSTALLATION.



HORIZONTAL MONITOR KIT



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INSTRUCTION MANUAL

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PUTTING YOUR BEST GAME FORWARD

KIT CONTENTS

Quantity	Part #	Description
1	870003	Final Round PCB
1	870100	Control Panel Overlay
1	870200	Marquee Styrene
2	870300	Side Decals
1	30304	Red Joy Stick
1	30305	Blue Joy Stick
2	30111	White Button
2	30112	Blue Button
4	30110	Red Button
8	30250	Palnuts
8	30202	Switch Holders
1	870400	Manual
1	870401	Schematics
1	40903	Kit Harness
1	40605	FCC Cage
1	40310	Clear Plexiglass Marquee

★ ★ ★ IMPORTANT NOTICE ★ ★ ★

The Japanese Amusement Machine Manufacturers Association (JAMMA) has introduced a new standard in video game P.C.B.'s. It was decided that all new products from any JAMMA member will use the same pin print-out on the edge connector. The edge connector will have 56 pin outs, 28 per side.

Konami Inc. will offer a 56 to 36 pin adaptor P.C.B. available through your distributor. This new adaptor P.C.B. will enable the new 56 pin out to adapt to Konami's old standard 36 pin out.

PREPARATION:

For best results, all old graphics should be removed completely from the cabinet. "Stick-on" graphics can be removed by using a hairdryer or hot air device. The heat from the dryer will loosen the adhesive, allowing you to easily peel them off — any adhesive residue can be cleaned off with acetone and a soft dry cloth. (DO NOT USE ACETONE ON SURFACES PAINTED WITH FLAT PAINT.)

TOOLS YOU NEED:

1. Foaming Aerosol (such as "Windex").
2. Soft Squeegee.
3. X-Acto Knife.

SIDE PANEL DECALS

1. Spray area of cabinet where Side Panel decals are to be applied with foaming aerosol or a mild soap solution.
2. Remove protective backing from decals.
3. Position decals into place.
4. With a soft squeegee, beginning from the center of the decal, slowly and evenly press out excess foam until you achieve a smooth finish.
5. Allow to set approximately 2 to 3 hours before handling. Maximum adherence is achieved in 48 to 72 hours.

6. Trim side decal to fit your cabinet.

CONTROL PANEL OVERLAY:

1. Refer to Recommended Control Panel Layout on page 1.
2. Drill any new holes needed.
3. Plug any holes that will not be used. (A permanent epoxy-filler works well for this step.)
4. Pre-position the overlay prior to removing the backing.
5. Slowly apply the overlay — inch by inch on the control panel, removing the backing as you apply it.
6. Once it's in place, by using an X-Acto knife, cut around the button and joystick placements.

INSTRUCTION/BUTTON DECALS:

Apply the Player Instruction, Button and 1 Player/2 Player decals in their respective positions. Apply pressure liberally. Allow to set as long as possible before putting game on location.

NOTE: Maximum adherence is achieved in 48 to 72 hours.

MARQUEE

(WEAR PROTECTIVE GLASSES WHILE TRIMMING MARQUEE)

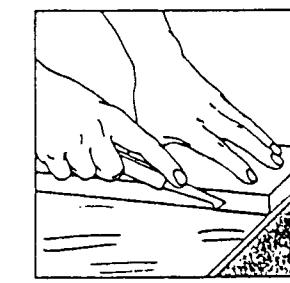
1/8" Acrylic Marquee should be cut to fit your game. DO NOT remove protective mask until this is done.

One way of cutting your Marquee is as follows: (Be sure to protect painted side of Marquee from any surface which may scratch or mar finish).

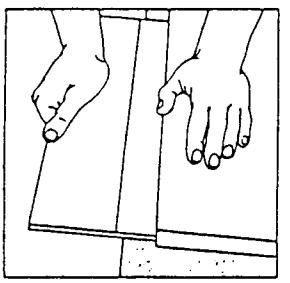
CUTTING WITH A KNIFE OR SCRIBER:

Acrylic sheet up to 3/16" thick may be cut by a method similar to that used for cutting window glass. Use a scriber of some kind — a scribing knife such as the one pictured, a metal scriber, an awl, or even a sturdy craft knife — to score the sheet. Draw the scriber several times (7 or 8 times for a 3/16" thick piece) along a straight edge held firmly in place. It is best not to remove the protective masking. Make the cuts carefully using firm, even pressure. For best results make each stroke cleanly off the edge of the sheet.

Then clamp the acrylic sheet or hold it rigidly under a straight edge with the scribe mark hanging just over the edge of a table. Protect your hands with a cloth, and apply a sharp downward pressure to the other side of the sheet. It will break along the scratch. Scrape the edges to smooth any sharp corners. This method is not recommended for long breaks or thick material.



Always draw the scribing knife along a straight edge.



Break sheet over edge of table after scribing.

P.C.B. CAGE INSTALLATION

Konami, Inc. now supplies a new style P.C.B. cage which is superior to old style cages because of ease of installation. The cage is made of a 32 point stem-stock which is fire retardant.

TO INSTALL THE CAGE:

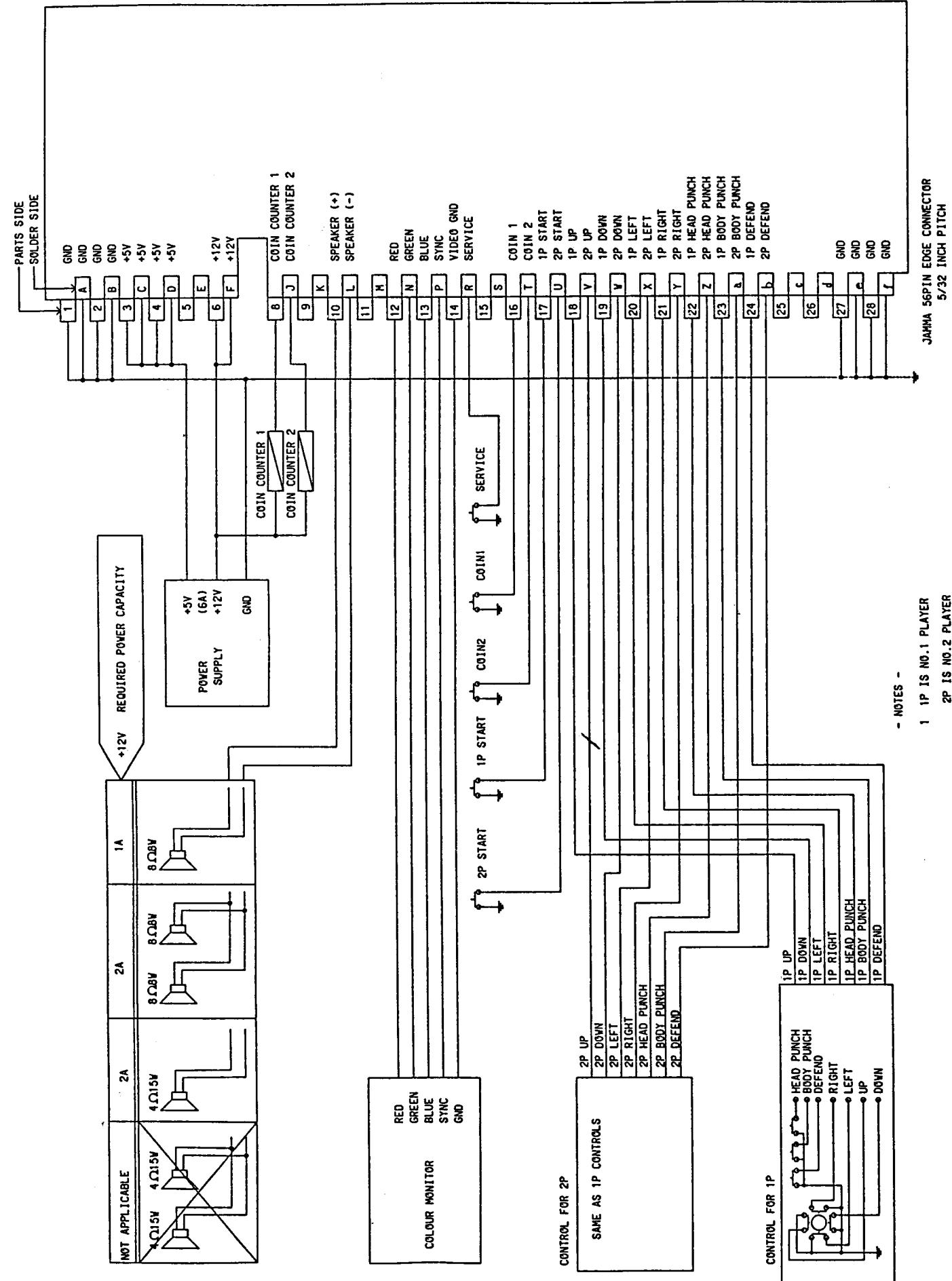
1. Open cage bottom and secure to desired P.C.B. position.
2. Install printed circuit board inside cage using wood screws, screwed through the cage bottom into cabinet side.
3. Close the cage over printed circuit board and secure with latch on cage.

FINAL ROUND WIRING HARNESS

WIRE COLOR KEY:

		Solder Side		Parts Side	
BLACK		GND	A 1	GND	BLACK
BLACK		GND	B 2	GND	BLACK
RED		+5V DC	C 3	+5V DC	RED
RED		+5V DC	D 4	+5V DC	RED
GREEN	- 5	NOT USED	E 5	NOT USED - 5	GREEN
ORANGE		+ 12V DC	F 6	+ 12V DC	ORANGE
		*KEY	H 7	*KEY	
BROWN/YELLOW	COIN COUNTER 2		J 8	COIN COUNTER 1	GREEN/GRAY
	(EMPTY)		K 9	(EMPTY)	
WHITE/BROWN	SPEAKER		L 10	SPEAKER	YELLOW/GRAY
	(EMPTY)		M 11	(EMPTY)	
WHITE/GREEN	VIDEO GREEN		N 12	VIDEO RED	RED/WHITE
WHITE	VIDEO SYNC		P 13	VIDEO BLUE	BLUE/WHITE
RED/YELLOW	SERVICE SW		R 14	VIDEO GROUND	BLACK
	(EMPTY)		S 15	(EMPTY)	
VIOLET/WHITE	COIN 2		T 16	COIN 1	BLUE/BROWN
RED/GREEN	2P START		U 17	1P START	PINK/YELLOW
BLUE/YELLOW	2P UP		V 18	1P UP	ORANGE/WHITE
VIOLET/YELLOW	2P DOWN		W 19	1P DOWN	BLACK/WHITE
ORANGE/GREEN	2P LEFT		X 20	1P LEFT	RED/GRAY
ORANGE/YELLOW	2P RIGHT		Y 21	1P RIGHT	GRAY/WHITE
BLACK/YELLOW	2P HEAD PUNCH		Z 22	1P HEAD PUNCH	PINK/WHITE
ORANGE/GRAY	2P BODY PUNCH		a 23	1P BODY PUNCH	GREEN/BROWN
BROWN/WHITE	2P BLOCK PUNCH		b 24	1P BLOCK PUNCH	RED/BROWN
GREEN/YELLOW	NOT USED		c 25	NOT USED	WHITE/BLACK
BLUE/GRAY	NOT USED		d 26	NOT USED	WHITE/VIOLET
BLACK	GND		e 27	GND	BLACK
BLACK	GND		f 28	GND	BLACK

(BASE COLOR/LINE COLOR)



DIP SWITCH SETTINGS

DIP SWITCH NO. 1 SETTINGS

1. COIN SWITCH NO. 1 SETTINGS

SW	1	2	3	4	COIN	PLAY
○	OFF	OFF	OFF	OFF	1	1
	ON				1	2
	OFF	ON			1	3
	ON				1	4
	OFF	OFF	ON	OFF	1	5
	ON				1	6
	OFF	ON			1	7
	ON				2	1
	OFF	OFF	OFF	ON	2	3
	ON				2	5
	OFF	ON			3	1
	ON				3	2
	OFF	OFF	ON	ON	3	4
	ON				4	1
	OFF	ON			4	3
	ON					FREEPLAY

FREEPLAY: You can play games without coins.

2. COIN SWITCH NO. 2 SETTINGS

SW	5	6	7	8	COIN	PLAY
○	OFF	OFF	OFF	OFF	1	1
	ON				1	2
	OFF	ON			1	3
	ON				1	4
	OFF	OFF	ON	OFF	1	5
	ON				1	6
	OFF	ON			1	7
	ON				2	1
	OFF	OFF	ON	ON	2	3
	ON				2	5
	OFF	ON			3	1
	ON				3	2
	OFF	OFF	ON	ON	3	4
	ON				4	1
	OFF	ON			4	3
	ON					VOID

DIP SWITCH NO. 2 SETTINGS

1. PLAYER'S BASIC ENERGY

SW	1	2	ENERGY
○	OFF	OFF	18
	ON		20
	OFF	ON	22
	ON		24

2. DIFFICULTY OF THE GAME

SW	6	7	DIFFICULTY
○	OFF	OFF	EASY
	ON		NORMAL
	OFF	ON	DIFFICULT
	ON		VERY DIFFICULT

3. SOUND IN ATTRACTIVE MODE

SW	8	SOUND
○	OFF	OFF
	ON	ON

SW3, SW4 and SW5 are not used.

DIP SWITCH NO. 3 SETTINGS

1. VIDEO SCREEN FLIP

SW	1	
○	OFF	NORMAL
	ON	UPSIDE DOWN

2. CHANGE OF MODE

SW	3	MODE
○	OFF	GAME
	ON	TEST

SW2 and SW4 are not used.

○ shows recommended settings.

TECHNICAL INFORMATION

(1) Required power capacity
GND-Vcc 5V 6A or more
GND-(+12V)

*See the Wiring Diagram.

(2) Output

R (red) analog, positive.

G (green) analog, positive

B (blue) analog, positive

SYNC. H-V complexed, negative

(3) The monitor should be horizontally installed.

(4) Use the volume knob on the PCB to adjust sound level.
Turn the knob clockwise and it becomes louder.

(5) Handle with care.

SELF TEST

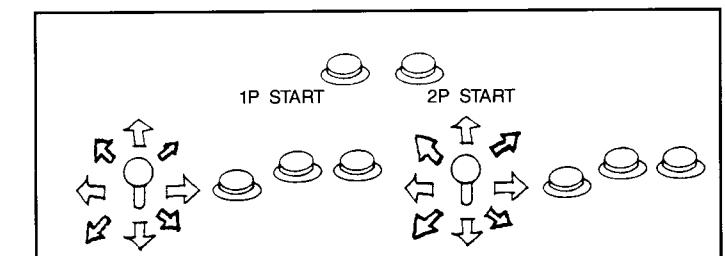
Normal: OK will be displayed. Then the game will start.
Abnormal: BAD will be displayed and self test will repeat itself.

MANUAL TEST

(1) How to start
Turn on the power with SW3 of the DIP SWITCH No. 3 on. Push player 1 start button to change items.

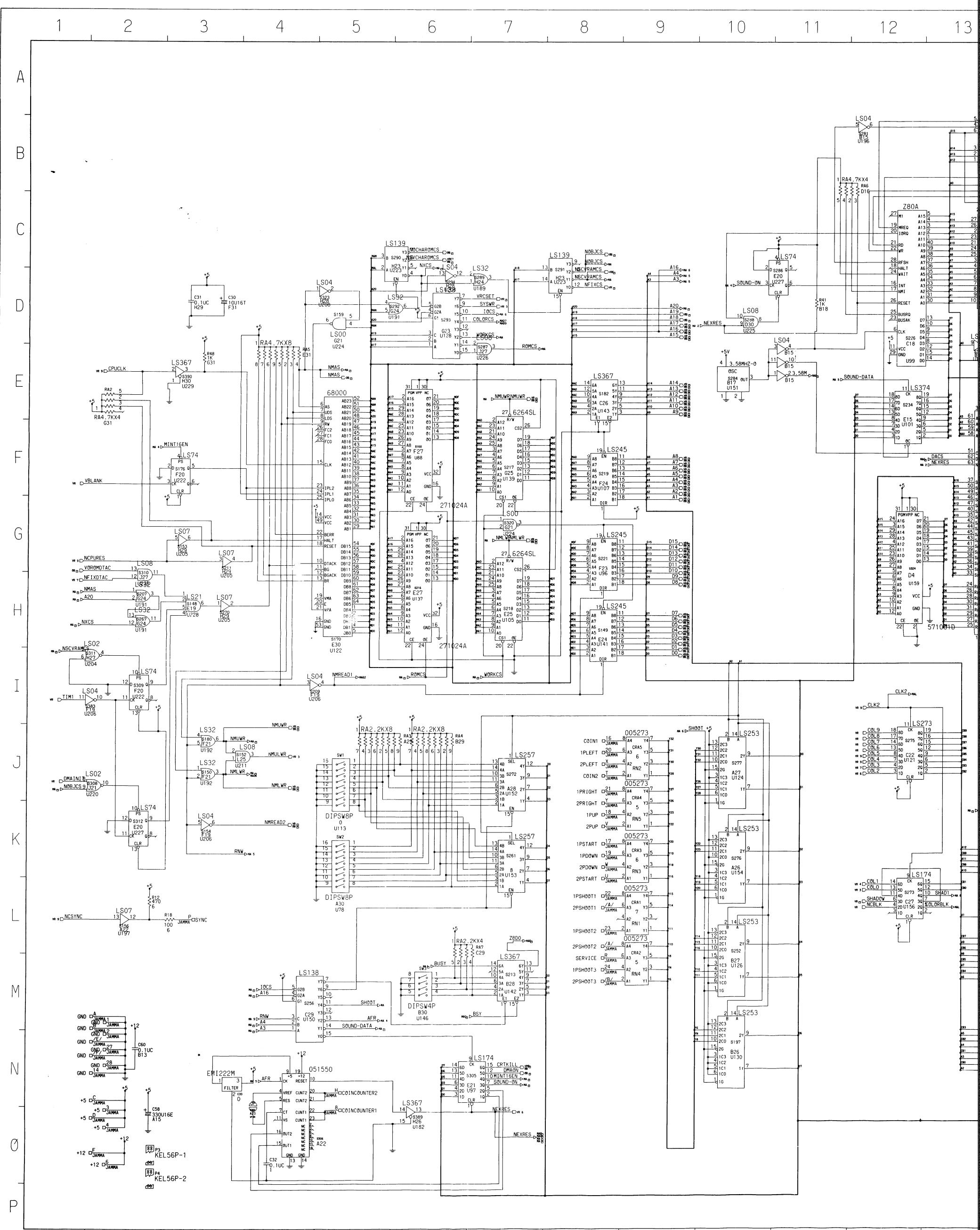
(2) Test items
1. ROM check
2. Picture contortion
3. Color check
4. I/O check
5. Sound check
6. Dip switch settings
*Push any of the function buttons for player 1 to change sound code.

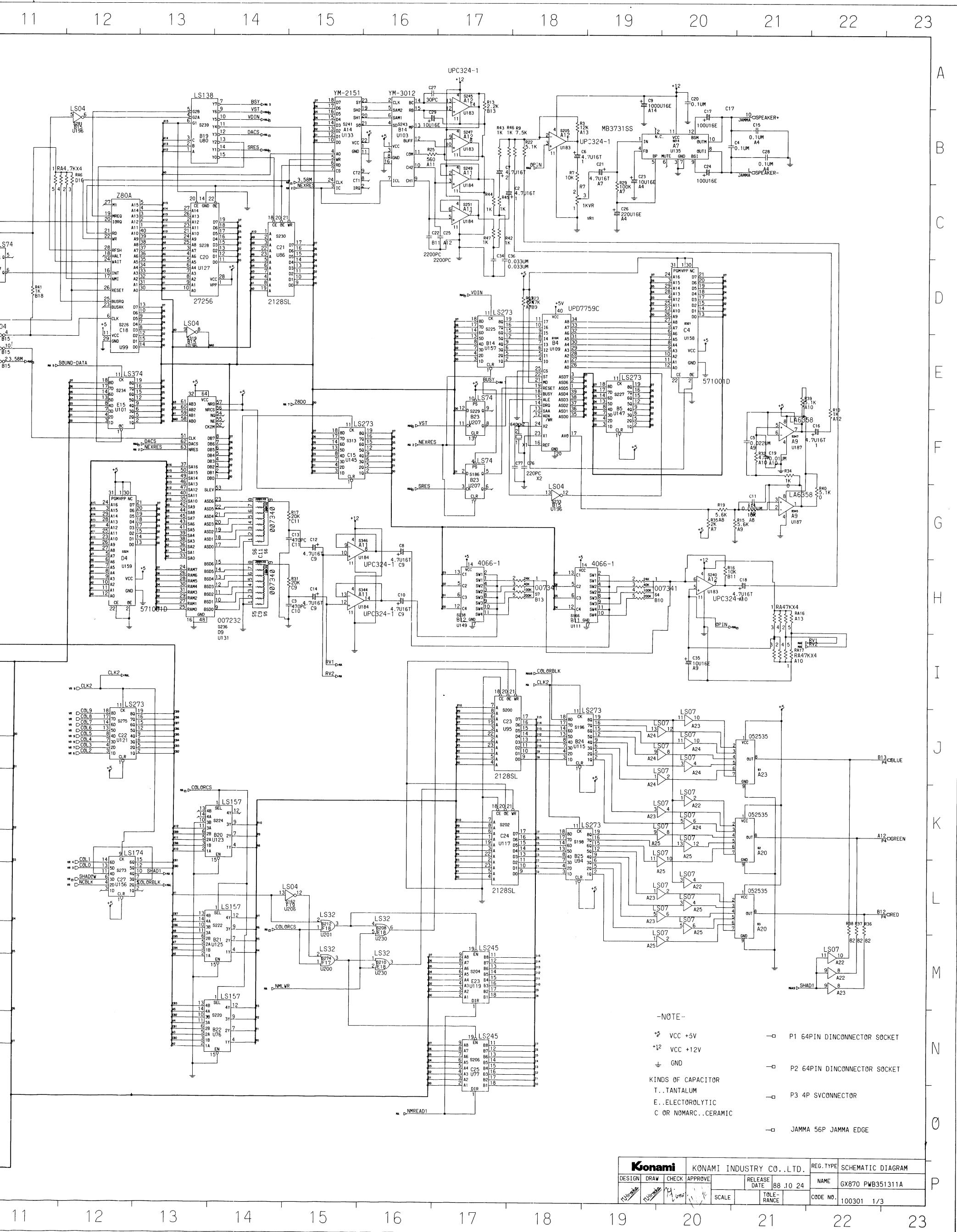
RECOMMENDED CONTROL PANEL LAYOUT

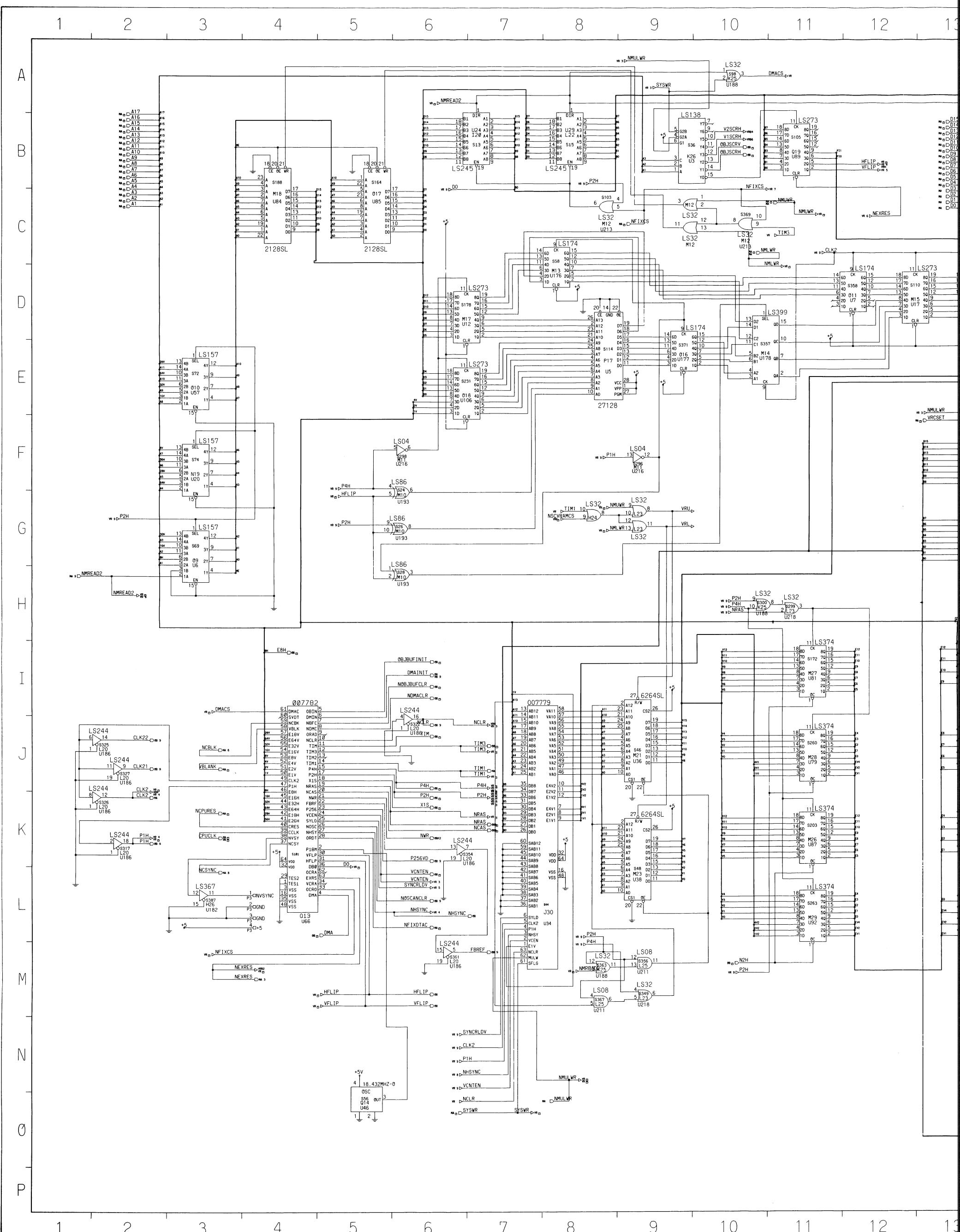


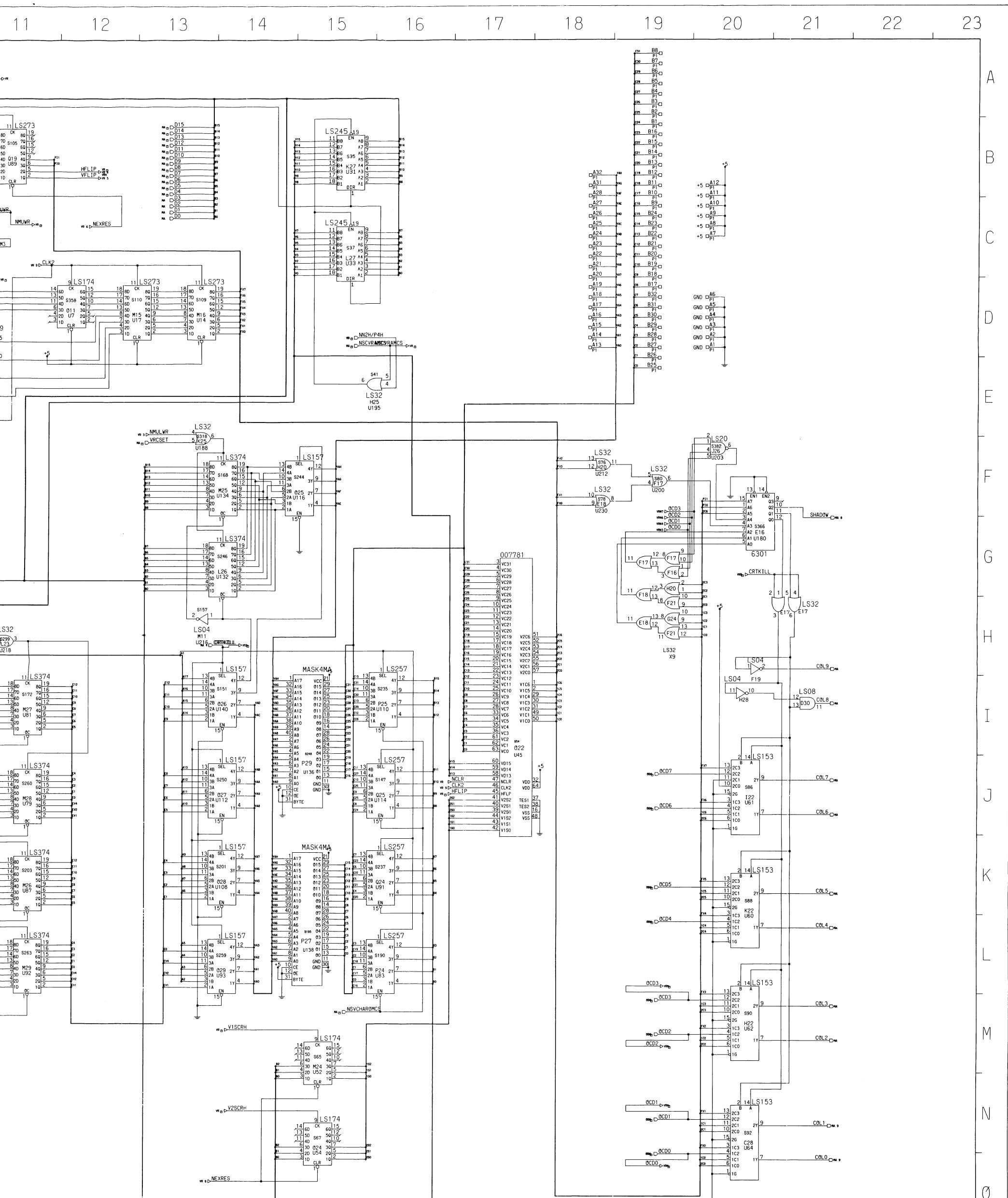
CONTROL PANEL INFORMATION

8-WAY FACE BODY BLOCK 8-WAY FACE BODY BLOCK
JOYSTICK PUNCH PUNCH PUNCH JOYSTICK PUNCH PUNCH PUNCH









Konami		KONAMI INDUSTRY CO.,LTD.				REG. TYPE	SCHEMATIC DIAGRAM		
DESIGN	DRAW	CHECK	APPROVE		RELEASE DATE	88 10 24	NAME	GX870 PWB351311A	
<i>Minami</i>	<i>Minami</i>	<i>PA</i>	<i>SC</i>	<i>W</i>	SCALE	:	TOLE- RANCE		
							CODE NO.	100301 2/3	

